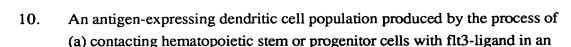
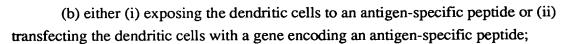
## What is claimed is:

- 1. A method for augmenting an immune response in a patient comprising the step of administering an amount of flt3-ligand to the patient sufficient to generate an increase in the number of the patient's dendritic cells.
- 2. A method according to claim 1, further comprising the step of administering one or more of the molecules selected from the group consisting of GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.
- 3. A method for augmenting an immune response in a patient having an infectious disease, comprising the step of administering of administering flt3-ligand in an amount sufficient to generate an increase in the number of the patient's dendritic cells.
- 4. A method according to claim 3, further comprising the step of administering one or more of the molecules selected from the group consisting of GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.
- 5. A method according to claim 3, wherein the infectious disease is HIV.
- 6. A method for augmenting an immune response in a patient having a cancerous or neoplastic disease, comprising the step of administering flt3-ligand in an amount sufficient to generate an increase in the number of the patient's dendritic cells.
- 7. A method according to claim 6, further comprising the step of administering one or more of the molecules selected from the group consisting of GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.
- 8. A preparation of dendritic cells having at least two cell surface markers selected from the group consisting of CD1a, HLA-DR and CD86, produced by contacting hematopoietic stem or progenitor cells with flt3-ligand.
- 9. A dendritic cell preparation according to claim 8 produced further by contacting the hematopoietic stem or progenitor cells with a molecule selected from the group consisting of GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.

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- amount sufficient to generate a dendritic cell population;
- (b) either (i) exposing the dendritic cells to an antigen-specific peptide or (ii) transfecting the dendritic cells with a gene encoding an antigen-specific peptide;
  - (c) allowing the dendritic cells to process and express the antigen; and
  - (d) purifying the antigen-expressing dendritic cells.
- 11. A dendritic cell population according to claim 10 wherein step (a) of the process further comprises contacting the hematopoietic stem or progenitor cells with a molecule selected from the group consisting of GM-CSF, IL-4, TNF- $\alpha$ , IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.
- 12. A method of driving hematopoietic stem or progenitor cells to a dendritic cell lineage comprising contacting such hematopoietic stem or progenitor cells with flt3-ligand.
- 13. A method of preparing an antigen-presenting dendritic cell population comprising the steps of:
- (a) contacting hematopoietic stem or progenitor cells with flt3-ligand in an amount sufficient to generate a dendritic cell population;
- (b) either (i) exposing the dendritic cells to an antigen-specific peptide or (ii) transfecting the dendritic cells with a gene encoding an antigen-specific peptide;
  - (c) allowing the dendritic cells to process and express the antigen; and
  - (d) purifying the antigen-expressing dendritic cells.
- 14. A method according to claim 13, wherein step (a) further comprises contacting the hematopoietic stem or progenitor cells with a molecule selected from the group consisting of GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.
- 15. A method of preparing antigen-specific T cells comprising the steps of:
- (a) contacting hematopoietic stem or progenitor cells with flt3-ligand in an amount sufficient to generate a dendritic cell population;



- (c) allowing the dendritic cells to process and express the antigen; and
- (d) allowing the dendritic cells to present the antigen to T cells.
- 16. A method of enhancing a mammal's immune response to a vaccine antigen, comprising the steps of administering to such mammal an immunogenic amount of the vaccine antigen and an immunogenicity-augmenting amount of flt3-ligand in concurrent or sequential combination with such vaccine antigen.
- 17. A vaccine adjuvant comprising a molecule selected from the group consisting of c-kit ligand and flt3-ligand.
- 18. A method for inducing tolerance of graft tissue in a host, comprising administering flt3-ligand to the host in an amount sufficient to increase the number of dendritic cells.
- 19. A dendritic cell expansion media comprising an effective amount of flt3-ligand and a cytokine selected from the group consisting of IL-3, IL-4, GM-CSF, TNF, C-Kit ligand and GM-CSF/IL-3 fusion proteins.